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**TESORO**

July 24, 2018

Tesoro Refining & Marketing Company LLC  
BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
150 Solano Way  
Martinez, CA 94553-1487

**USPS CERTIFIED MAIL: 7018 0680 0000 1371 1649**

Mr. Jeffrey Gove  
Director of Compliance and Enforcement  
Bay Area Air Quality Management District  
375 Beale Street, Suite 600  
San Francisco, California 94105

**SUBJECT : Title V Semi-Annual Monitoring Report for the Martinez Refinery (Plant ID B2758), and  
Amorco Terminal (Plant IDs B2759 and E1200)  
Reporting Period: January 1, 2018 to June 30, 2018**

Dear Mr. Gove:

Pursuant to the requirements outlined in Section I, Standard Conditions, Part F of the Tesoro Refining & Marketing Company LLC Title V Permit (issued January 11, 2016), and the Tesoro Logistics Operations LLC Title V Permit (issued August 5, 2013), the attached document includes information for deviations reported to have occurred during the reporting period. The Semi-Annual Monitoring report consists of two parts. The first part summarizes all of the Inoperative Monitors reported for the reporting period; the second part summarizes all the Title V deviations reported for the reporting period. This Title V Semi-Annual Monitoring Report contains the signature of Tesoro's responsible official, Mr. Thomas A. Lu, as required by Regulation 2-6-502, and by 40 CFR Part 70.6.

For questions, please contact David Chetkowski of my staff at (925) 335-3451.

Sincerely,

  
June Christman  
Manager, Environmental

DMC/kds



Attachment

cc: Mr. Ray Salilila, BAAQMD Enforcement Inspector (E-mail)

Mr. Jeffrey Gove  
Bay Area Air Quality Management District  
July 24, 2018  
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bcc: D. Chetkowski  
C. McDowell


**Tesoro Martinez Refinery**  
**Inoperative Monitors**  
**Reporting Period: 1/1/2018 to 6/30/2018**

Inoperative Monitors as defined by BAAQMD Regulations 1-522 and 1-523  
for the reporting period are summarized below:

Date	IMF ID#	Unit	Pollutant / Parameter
1/31/2018	07G08	FCCU/7 Boiler	NOX/SO2/CO/O2
2/3/2018	07G10	Furnace F-22	NOX
2/17/2018	07G27	6 Boiler	NOX/SO2/CO/O2
2/24/2018	07G34	FCCU/7 Boiler	NOX/SO2/CO/O2
3/23/2018	07G53	Furnace F-26	NOX
3/24/2018	07G50	Chenery GLM	SO2/H2S
3/28/2018	07G54	Furnace F-50	NOX
5/4/2018	07G93	Coke Silo Baghouses	Pressure Drop
5/7/2018	07G92	FCCU/7 Boiler	NOX/SO2/CO/O2

**Certification Statement**

I certify under penalty of law that based on the information and belief formed after reasonable inquiry, the statements and information in this document and in all attachments and other materials are true, accurate and complete



\_\_\_\_\_  
Signature of Responsible Official

Vice President, Martinez Refinery  
\_\_\_\_\_  
Title

7/31/2018  
\_\_\_\_\_  
Date

BAAQMD Title V Permit Semi-Annual Monitoring Report					
January-18 -- June-18					
B2758 & B2759 -- Tesoro Martinez Refinery and Amorco Terminal					
<u>Facility Address:</u> 150 Solano Way City: Martinez      State: CA      Zip Code: 94553			<u>Mailing Address:</u> 150 Solano Way City: Martinez      State: CA      Zip Code: 94553		
<u>Contact:</u> June Christman		<u>Title:</u> Environmental Manager		<u>Phone:</u> 925 - 370 - 3275	
Applicable Regulation / Permit Condition / Other: <u>Title V-VI(8535)(3)</u>					
Date Event Started:	Date Event Stopped:	Source (S#):	Abatement Device (A#):	Emission Point (P#):	
<u>05/29/2017</u>	<u>06/27/2018</u>		<u>A1422</u>	<u>S1422</u>	
<p>Event Description: This is not a deviation. The monitored pressure drop readings for scrubber A-1422 were not recorded during the period 5/29/2017 to 6/27/2018. The refinery believes that this is not a deviation because the pressure drop is monitored by operators locally during their daily rounds. Confusion over the language in the permit condition led this to be reported as a deviation.</p> <p><u>Probable Cause:</u>  The language in the permit does not specifically say to record pressure drop readings. Operators did not record the pressure drop readings because the permit condition does not say to record the pressure drop readings.</p> <p><u>Corrective Action or Preventive Steps Taken:</u>  To avoid future confusion, pressure drop readings have been added to the daily operator rounds. Operators are recording the observed pressure drop once per shift.</p>					
Applicable Regulation / Permit Condition / Other: <u>Title V-VI(8535)(2)</u>					
Date Event Started:	Date Event Stopped:	Source (S#):	Abatement Device (A#):	Emission Point (P#):	
<u>01/09/2018</u>	<u>02/06/2018</u>		<u>A1422</u>	<u>S1422</u>	
<p>Event Description: Calvert scrubber flooded with water and had to be shutdown when water was observed being ejected from the stack. The scrubber ran intermittently during troubleshooting and had to be shutdown for repair. NOV A56273 was issued on 5/3/2018.</p> <p><u>Probable Cause:</u>  Indeterminate because maintenance was performed on a number of components simultaneously before attempting restart. Any one, or combination, of the maintenance activities performed on the scrubber corrected the problem.</p> <p><u>Corrective Action or Preventive Steps Taken:</u>  The scrubber was taken offline, drained, and safely isolated. The scrubber was opened up, and maintenance was performed on a number of components simultaneously.</p>					

## Applicable Regulation / Permit Condition / Other:

BAAQMD 9-1-307Date Event  
Started:      Date Event  
Stopped:01/28/201801/29/2018

Source (S#):

Abatement Device (A#): A1402, A1525 Emission Point (P#): S1401

Event Description: A partial refinery power outage occurred at approximately 9:45 PM. The Sulfur Recovery Unit tripped off-line during this event. SO<sub>2</sub> exceeded the 250 ppm 1-hr average from 10:00 PM until midnight. The cause of the power outage is under investigation. The event was reported as RCA 07G05.

Probable Cause:

Momentary power outage caused all of the pumps in the ARU to trip offline, and DEA circulation pumps to trip offline. The simultaneous loss of circulation in both systems caused the SRU and SCOT plant to go off ratio which resulted in an emission excess.

Corrective Action or Preventive Steps Taken:

The SRU and SCOT operations stabilized after the affected pumps were restarted and stoichiometric ratios were re-established.

## Applicable Regulation / Permit Condition / Other:

BAAQMD 8-10-503Date Event  
Started:      Date Event  
Stopped:01/31/201801/31/2018

Source (S#):

Abatement Device (A#):

Emission Point (P#): B2758

Event Description: Refinery failed to maintain complete record of vessel depressurizations in accordance with Regulation 8-10. NOV A56274 was issued on 5/3/2018.

Probable Cause:

Some of the vessel opening recordkeeping forms were incomplete.

Corrective Action or Preventive Steps Taken:

Area Supervisors enacted new handling protocols in January 2018. All vessel opening forms are now maintained in clearly marked binders in the operator shelters. Forms are not to leave the binders, and Area Supervisors are responsible for ensuring the forms are completed and transmitted to Environmental.

## Applicable Regulation / Permit Condition / Other:

BAAQMD 8-5-322Date Event  
Started:      Date Event  
Stopped:02/13/201802/16/2018Source (S#): S696

Abatement Device (A#):

Emission Point (P#):

Event Description: On 2/13/2018, during weekly operator rounds, Tank 696 (internal floating roof) in Tract 3 was observed to have a gap on a portion of the secondary seal. NOV A56275 was issued on 5/3/2018.

Probable Cause:

The gap formed when a section of the secondary seal apparently got caught between the tank wall and the primary mechanical shoe seal during normal operations.

Corrective Action or Preventive Steps Taken:

On 2/14/2018, the refinery began drawing down the level of the tank with the intent to remove the tank from service.

On 2/16/2018, a portable thermal oxidizer was connected to a manway on the fixed roof to mitigate emissions while the tank was being emptied.

On 2/21/2018, the portable thermal oxidizer was used to degas the tank.

Once emptied and degassed, a new secondary seal and new, longer, rim extender were installed. The longer rim extender will ensure that the secondary seal does not make contact with the primary seal.

## Applicable Regulation / Permit Condition / Other:

Title V-VI(23129)(12)Date Event  
Started:      Date Event  
Stopped:03/26/201803/26/2018Source (S#): S1511Abatement Device (A#): A1511

Emission Point (P#):

Event Description: Furnace F-78 NOX emissions increased while spalling the furnace. Ammonia injection to the SCR was manually increased to reduce NOX emissions. The event was reported to BAAQMD on 3/27/2018 as RCA 07G52. On 7/17/2018, BAAQMD issued Notice of Violation (NOV) A58281 for this deviation.

Probable Cause:

Ammonia rate to the SCR dropped during the spalling operation, allowing NOX emissions to increase. In addition, DCS did not alert the console operator until after the emission excess had occurred.

Corrective Action or Preventive Steps Taken:

DCS programmers are troubleshooting to determine why the console operator was not alerted prior to the emission excess occurring. The console operator was counseled on the importance of monitoring and adjusting the ammonia injection rate to the SCR during all modes of operation.

## Applicable Regulation / Permit Condition / Other:

Title V-VI(23129)(12)Date Event  
Started:      Date Event  
Stopped:04/03/201804/03/2018Source (S#): S1511Abatement Device (A#): A1511

Emission Point (P#):

Event Description: Furnace F-78 NOX emissions increased while spalling the furnace. Ammonia injection to the SCR was manually increased to reduce NOX emissions. The event was reported to BAAQMD on 4/4/2018 as RCA 07G61. On 6/11/2018, BAAQMD determined that this deviation was not a violation.

Probable Cause:

Ammonia rate to the SCR dropped during the spalling operation, allowing NOX emissions to increase. In addition, DCS did not alert the console operator until after the emission excess had occurred.

Corrective Action or Preventive Steps Taken:

DCS programmers are troubleshooting to determine why the console was not alerted prior to the emission excess occurring. The console operator was counseled on the importance of monitoring and adjusting the ammonia injection rate to the SCR during all modes of operation. Emissions have been below limits during subsequent spalling operations.

## Applicable Regulation / Permit Condition / Other:

BAAQMD 9-2-301Date Event  
Started:      Date Event  
Stopped:05/28/201805/28/2018Source (S#): B2758

Abatement Device (A#):

Emission Point (P#):

Event Description: A brief period of elevated H2S was monitored at the Pacheco Slough GLM. The 3-min average concentration exceeded 60 ppb for one minute. The excess was reported to the District on 5/29/2018 as RCA 07H14.

Probable Cause:

In preparation for a planned outage of the refinery's secondary wastewater treatment units, the water level in the oxidation pond was lowered, exposing some sediment in the south end of the pond to the air.

Corrective Action or Preventive Steps Taken:

Water levels will be evaluated to minimize the likelihood of exposing sediments to the air. A minimum pond level may be established, if deemed necessary by Operations.

Applicable Regulation / Permit Condition / Other:

Title V-VI(19199)(H4)

Date Event Started:      Date Event Stopped:

06/02/2018      06/02/2018      Source (S#): S1106      Abatement Device (A#): A1106      Emission Point (P#):

Event Description: This is not a deviation. Furnace F-72 indicated a NOX excess on 6/2/2018. The event was reported to BAAQMD on 6/6/2018 as RCA 07H23.

Probable Cause:

The HVAC cooling unit for the CEMS shelter failed. The NOX analyzer overheated, creating false NOX readings that were biased high. The CEMS shelter is equipped with primary and backup HVAC cooling units; however, the primary cooling unit was down for repair when the backup cooling unit failed on 6/2/2018.

Corrective Action or Preventive Steps Taken:

The backup HVAC cooling unit was repaired, and NOX readings dropped once cooling was restored to the CEMS shelter. I/E is periodically meeting with the refinery's heating/cooling contractor to ensure maintenance priorities are effectively communicated.

Applicable Regulation / Permit Condition / Other:

BAAQMD 9-2-301

Date Event Started:      Date Event Stopped:

06/04/2018      06/04/2018      Source (S#): B2758      Abatement Device (A#):      Emission Point (P#):

Event Description: A brief period of elevated H2S was monitored at the Waterfront Road GLM. The 3-min average concentration exceeded 60 ppb for 7 minutes. The excess was reported to the District on 6/7/2018 as RCA 07H27.

Probable Cause:

In preparation for a planned outage of the refinery's secondary wastewater treatment units, the water level in the oxidation pond was lowered, exposing some sediment in the south end of the pond to the air.

Corrective Action or Preventive Steps Taken:

Water levels will be evaluated to minimize the likelihood of exposing sediments to the air. A minimum pond level may be established, if deemed necessary by Operations.

Applicable Regulation / Permit Condition / Other:

Title V-VI(8077)(A2)(B), Title V-VI(8077)(B7)(A)

Date Event Started:      Date Event Stopped:

06/15/2018      06/15/2018      Source (S#): S973, S974      Abatement Device (A#): A31, A31      Emission Point (P#):

Event Description: Furnaces F55 (S-973) and F56 (S-974) indicated a NOX excess in their combined stack on 6/15/2018. The event was reported to BAAQMD on 6/19/2018 as RCA 07H40.

Probable Cause:

During a unit startup, ammonia injection to the SCR was not initiated as soon as catalyst temperatures reached 530 deg. F, as required by permit. The NOx emission limit was exceeded due to the delayed injection of ammonia to the SCR.

Corrective Action or Preventive Steps Taken:

The startup procedure will be updated to ensure that ammonia is promptly injected when the SCR catalyst temperature reaches 530 deg. F.

Date Event  
Started:

Date Event  
Stopped:

06/30/2018

06/30/2018

Source (S#): S958

Abatement Device (A#): A958

Emission Point (P#):

Event Description: The required 2Q2018 quarterly emission test for 4GAS Compressor Engine #4 (S-958) was not conducted because the engine did not run at any time during the calendar quarter.

Probable Cause:

The engine did not run at any time during the calendar quarter.

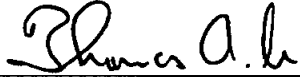
Corrective Action or Preventive Steps Taken:

None. The refinery could not conduct the required quarterly test because the engine did not operate at any time during the calendar quarter; therefore, this deviation is not a violation. This deviation was reported for completeness only.



Certification Statement:

I certify under penalty of law that based on the information and belief formed after reasonable inquiry, the statements and information in this document and in all attachments and other materials are true, accurate, and complete.



Signature of Responsible Official

Thomas A. Lu

Print Name

Vice President,  
Martinez Refinery

Title

7/31/2018

Date

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